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CLAIM AMENDMENTS

1. (Currently amended) A method comprising the steps of:

directing a call intended for a mobile to a virtual tandem switch;

querying, by the virtual tandem switch, a home location register to obtain call information for the mobile;

converting control messages at a first location, between a packet-based protocol and a non-packet-based protocol;

converting voice messages at a first location, between a packet-based protocol and a non-packet-based protocol;

converting control messages at a second location, between a packet-based protocol and a non-packet-based protocol;

converting voice messages at a second location, between a packet-based protocol and a non-packet-based protocol; and

setting up the call to the mobile over a packet-based transport network;

wherein the virtual tandem switch supports protocols selected from the group consisting of ISUP. Primary Rate Interface (PRI), and Transaction Capabilities Application Part (TCAP), ATM UNI 3.1/4.0, Internet Protocol Device Control (IPDC), IPDC+, Media Gateway Control Protocol (MGCP), H.248, ISUP+, and bearer independent call control (BICC).

2. (Canceled)

2. 3. (Previously presented) The method of claim 1, wherein the step of converting non-packet-based protocol voice messages at a first location comprises converting a time division multiplexed protocol.

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4. (Previously presented) The method of claim 1, wherein the call is directed to the mobile while the mobile is roaming away from its home service area.

5. (Currently amended) A switch comprising:

a first converter arranged and constructed to convert control messages between a packet-based protocol and a first protocol, wherein the first converter is located at a first geographic location;

a second converter arranged and constructed to convert voice messages between a packet-based protocol and a first protocol, wherein the second converter is located at the first geographic location;

a third converter arranged and constructed to convert control messages between a packet-based protocol and a second protocol, wherein the third converter is located at a second geographic location; and

a fourth converter arranged and constructed to convert voice messages between a packet-based protocol and a second protocol, wherein the fourth converter is located at the second geographic location; and

wherein such that the switch provides a gateway between the public switched telephone network and a wireless network; and

wherein the switch supports protocols selected from the group consisting of ISUP, Primary Rate Interface (PRI), and Transaction Capabilities Application Part (TCAP), ATM UNI 3.1/4.0, Internet Protocol Device Control (IPDC), IPDC+, Media Gateway Control Protocol (MGCP), H.248, ISUP+, and bearer independent call control (BICC).

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9   6. (Original) The switch of claim 5, wherein the first protocol is an ISDN User Part

signalling protocol and the second protocol is a time division multiplexed protocol.

10   7. (Original) The switch of claim 5, further comprising a network feature server, arranged

and constructed to provide network routing between the converters.

11   8. (Original) The switch of claim 5, further comprising a switch management system,

arranged and constructed to provide operation, administration, and provisioning of the converters

of the switch.

4   9. (Previously presented) The method of claim 1, wherein the step of converting the non-

packet-based protocol voice messages at a second location comprises converting a time division

multiplexed protocol.

5   10. (Currently amended) The the method of claim 1, further comprising the step of

routing at least one of the control messages and voice messages between the first and the second

locations with a network feature server.

12   11. (Currently amended) A method of providing a gateway between a public switched

telephone network and a wireless network comprising the steps of:

        converting control messages at a first location, between a packet-based protocol and a

non-packet-based protocol;

        converting voice messages at a first location, between a packet-based protocol and a non-

packet-based protocol;

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converting control messages at a second location, between a packet-based protocol and a non-packet-based protocol; and

converting voice messages at a second location, between a packet-based protocol and a non-packet-based protocol;

wherein the gateway supports protocols selected from the group consisting of ISUP, Primary Rate Interface (PRI), and Transaction Capabilities Application Part (TCAP), ATM UNI 3.1/4.0, Internet Protocol Device Control (IPDC), IPDC+, Media Gateway Control Protocol (MGCP), H.248, ISUP+, and bearer independent call control (BICC).

13 12. (Previously presented) The method of claim 11, wherein the step of converting the non-packet-based protocol voice messages at a first location comprises converting a time division multiplexed protocol.

14 13. (Previously presented) The method of claim 11, wherein the step of converting the non-packet-based protocol voice messages at a second location comprises converting a time division multiplexed protocol.

15 14. (Currently amended) The the method of claim 11, further comprising the step of routing at least one of the control messages and voice messages between the first and the second locations with a network feature server.

16 15. (New) The method of claim 1, wherein the mobile accesses a wireless network based on a wireless air interface selected from the group consisting of IS-41, TDMA, CDMA, GSM, and UMTS.

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~~16.~~ (New) The method of claim 1, wherein the virtual tandem switch performs echo

control.

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